

No. 16-1011

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In the  
**Supreme Court of the United States**

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WESTERNGECO LLC,  
*Petitioner,*

v.

ION GEOPHYSICAL CORPORATION,  
*Respondent.*

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**On Writ of Certiorari to the  
United States Court of Appeals  
for the Federal Circuit**

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**JOINT APPENDIX**

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February 23, 2018

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Petition for Writ of Certiorari Filed February 17, 2017  
Petition for Writ of Certiorari Granted January 12, 2018

**TABLE OF CONTENTS**

*WesternGeco LLC v. ION Geophysical Corporation*, No. 13-1527 (Fed. Cir),  
 Relevant Docket Entries ..... JA-1

*WesternGeco LLC v. ION Geophysical Corporation*, No. 4:09-cv-01827 (S.D. Tex.),  
 Relevant Docket Entries ..... JA-14

*WesternGeco LLC v. ION Geophysical Corporation*, No. 4:09-cv-01827 (S.D. Tex.),  
 Jury Instructions..... JA-36

*WesternGeco LLC v. ION Geophysical Corporation*, No. 4:09-cv-01827 (S.D. Tex.),  
 Docket No. 665, Exhibit 3 ..... JA-81

The following opinions, decisions, judgments, and orders have been omitted in printing this joint appendix because they appear on the following page in the appendix to the Petition for Certiorari:

September 21, 2016 Opinion and Dissent,  
 837 F.3d 1358 (Fed. Cir.) ..... 1a

July 2, 2015 Opinion and Dissent,  
 791 F.3d 1340 (Fed. Cir.) ..... 23a

June 19, 2013 Memorandum and Order,  
 953 F. Supp. 2d 731 (S.D. Tex.) ..... 76a

July 16, 2012 Memorandum and Order,  
 2012 WL 2911968 (S.D. Tex.) ..... 141a

June 29, 2012 Memorandum and Order,  
 2012 WL 2568167 (S.D. Tex.) ..... 155a

May 7, 2014 Final Judgment (S.D. Tex.)..... 168a

August 16, 2012 Jury Verdict (S.D. Tex.)..... 170a

October 30, 2015 Order Denying  
Rehearing, and Statement of  
Judge Wallach, Dissenting from  
Denial of Rehearing, 621 F. App'x 663  
(Fed. Cir.)..... 176a

JA 1

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

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No. 13-1527

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WESTERNGECO LLC

v.

ION GEOPHYSICAL CORPORATION

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**DOCKET ENTRIES**

Date Filed	#	Docket Text
07/23/2013	1	Appeal docketed. Received: 07/23/2013. [93761] Entry of Appearance due 08/06/2013. Certificate of Interest is due on 08/06/2013. Docketing Statement due 08/06/2013. Appellant/Petitioner's brief is due 09/23/2013.
***		
09/19/2013	13	ORDER granting motion to stay appeal [8] filed by Appellant ION Geophysical Corporation and Appellee WesternGeco L.L.C. The parties are directed to inform this court within 14 days of the entry of final judgment by the district court how they believe this appeal should proceed. The

JA 2

		parties further are directed to file status reports every 60 days. All pending motions [12] are moot. Service: 09/19/2013 by clerk. [104843]
***		
06/13/2014	21	ORDER filed. The stay is lifted in 2013-1527, 2014-1121. Appeal Nos. 2013-1527, 2014-1121, 2014-1526, and 2014-1528 are consolidated. The revised official caption is reflected in the order. Ion Geophysical Corporation's opening brief is due no later than September 4, 2014. WesternGeco LLC's opening brief is due no later than October 21, 2014. Ion Geophysical Corporation's reply brief is due no later than December 8, 2014. WesternGeco LLC's reply brief is due no later than December 29, 2014. The joint appendix is due no later than January 5, 2015.  Service: 06/13/2014 by clerk. [161379] [13-1527, 14-1526]
***		
09/05/2014	62	TENDERED from Appellant ION Geophysical Corporation. Title: CORRECTED OPENING BRIEF. Service: 09/05/2014 by email. [180284]

JA 3

09/05/2014	63	TENDERED from Appellant ION Geophysical Corporation. Title: CORRECTED CONFIDENTIAL OPENING BRIEF Service: 09/05/2014 by email. [180362]
09/05/2014	64	CONFIDENTIAL BRIEF FILED for Appellant ION Geophysical Corporation [63]. Title: CONFIDENTIAL CORRECTED OPENING BRIEF. Number of Pages: 59. Service: 09/05/2014 by email. Pursuant to ECF-10(B) six paper copies should be filed of the confidential version only. [180368]
09/05/2014	65	BRIEF FILED for Appellant ION Geophysical Corporation [62]. Title: CORRECTED OPENING BRIEF. Number of Pages: 59. Service: 09/05/2014 by email. Pursuant to ECF-10, filer is directed to file six copies of the brief in paper format. The paper copies of the brief should be received by the court on or before 09/10/2014. Cross-Appellant WesternGeco L.L.C. brief is due 10/21/2014. [180372]
09/08/2014	66	6 paper copies of the 1st brief Brief [65] received from Appellant ION Geophysical Corporation. [180745]

JA 4

10/21/2014	67	TENDERED from Cross-Appellant WesternGeco L.L.C.. Title: OPENING BRIEF. Service: 10/21/2014 by email. [191500]
10/21/2014	68	BRIEF FILED for Cross-Appellant WesternGeco L.L.C. [67]. Title: OPENING BRIEF. Number of Pages: 89. Service: 10/21/2014 by email. Pursuant to ECF-10, filer is directed to file six copies of the brief in paper format. The paper copies of the brief should be received by the court on or before 10/28/2014. Appellant's reply brief is due 12/08/2014. [191866]--[Edited 11/10/2014 by SW]
10/29/2014	69	6 paper copies of the Opening Response Brief [68] received from Cross-Appellant WesternGeco L.L.C.. [193419]
***		
12/09/2014	78	TENDERED from Appellant ION Geophysical Corporation. Title: CORRECTED REPLY BRIEF. Service: 12/09/2014 by email. [203002]
12/10/2014	79	CORRECTED REPLY BRIEF FILED for Appellant ION Geophysical Corporation [78]. Number of Pages: 54. Service: 12/10/2014 by email. Pursuant to

		ECF-10, filer is directed to file six copies of the brief in paper format. Cross-Appellant's reply brief is due 12/29/2014. The paper copies of the brief should be received by the court on or before 12/15/2014. [203060]
12/11/2014	80	6 paper copies of the Reply Brief [79] received from Appellant ION Geophysical Corporation. [203431]
12/29/2014	81	TENDERED from Cross-Appellant WesternGeco L.L.C.. Title: REPLY BRIEF. Service: 12/29/2014 by email. [206437]
01/05/2015	82	Statement of Compliance with Fed. Cir. R. 33 for Appellant ION Geophysical Corporation and Cross-Appellant WesternGeco L.L.C.. Service: 01/05/2015 by email. [207275]
01/05/2015	83	TENDERED from Appellant ION Geophysical Corporation and Cross-Appellant WesternGeco L.L.C.. Title: CONFIDENTIAL JOINT APPENDIX Service: 01/05/2015 by email. [207333]
01/05/2015	84	TENDERED from Appellant ION Geophysical Corporation and Cross-Appellant WesternGeco L.L.C.. Title: JOINT APPENDIX.



JA 6

		Service: 01/05/2015 by email. [207337]
12/29/2014	85	REPLY BRIEF FILED for Cross-Appellant WesternGeco L.L.C. [81]. Number of Pages: 29. Service: 12/29/2014 by email. Pursuant to ECF-10, filer is directed to file six copies of the brief in paper format. The paper copies of the brief should be received by the court on or before 01/12/2015. [207428]
01/05/2015	86	CONFIDENTIAL JOINT APPENDIX FILED for ION Geophysical Corporation [83]. Number of Pages: 2086. Service: 01/05/2015 by US mail. Pursuant to ECF-10 six paper copies should be filed of the confidential version only. [207914]
01/05/2015	87	APPENDIX FILED for ION Geophysical Corporation [84]. Number of Pages: 2076. Service: 01/05/2015 by email. Pursuant to ECF-10, filer is directed to file six copies of the brief in paper format. The paper copies of the brief should be received by the court on or before 01/12/2015. [207917]
01/09/2015	88	6 paper copies of the Reply Brief [85] received from Cross-

		Appellant WesternGeco L.L.C.. [208613]
01/09/2015	89	6 paper copies of the appendix Brief [86] received from Appellant ION Geophysical Corporation. [208652]
01/21/2015	90	NOTICE OF CALENDARING. Panel: 1503L. Case scheduled Mar 05, 2015 10:00 a.m. at the United States Court of Appeals for the Federal Circuit (Howard T. Markey National Courts Building, 717 Madison Place, N.W. Washington, DC 20439), Courtroom 203. Response to oral argument order due: 02/17/2015. Counsel should check-in 30 minutes prior to the opening of the session. Please review the Oral Argument Order. [211194] THIS NOTICE APPLIES TO CASE(S): [14-1774, 14-1469, 13-1527, 14-1486]
01/26/2015	91	MOTION of Appellant ION Geophysical Corporation to stay appeal. Response/Opposition is due 02/05/2015 [Consent: opposed]. Service: 01/26/2015 by hand delivery. [212519]--[Edited 01/26/2015 by SW]
02/02/2015	92	ORDER filed denying [91] motion to stay appeal filed by ION Geophysical Corporation. By:

		Merits Panel (Per Curiam). Service as of this date by Clerk of Court. [214485]
***		
03/06/2015	96	Submitted after ORAL ARGUMENT by David J. Healey for ION Geophysical Corporation and Gregg F. LoCascio for WesternGeco L.L.C..  Panel: Judge: Dyk , Judge: Wallach , Judge: Hughes. [222122]
07/02/2015	97	OPINION and JUDGMENT filed. The judgment or decision is: Affirmed-in-part, Reversed-in- part, and Remanded. (Precedential Opinion). (For the Court: Dyk,Circuit Judge; Wallach,Circuit Judge and Hughes,Circuit Judge). Dissenting-in-part opinion filed by Circuit Judge Wallach. [253149] [13-1527, 14-1121, 14- 1526, 14-1528] Vacated pursuant to court order. See Doc. No. [127]
***		
07/29/2015	100	Petition for en banc rehearing filed by Cross-Appellant WesternGeco L.L.C.. Service: 07/29/2015 by email. <i>The paper copies of the petition must be filed</i>

		<i>within two business days (see ECF-10(d)).The required paper copies should be received by the court on or before 07/31/2015 [260293]</i>
***		
08/12/2015	106	MOTION of Carnegie Mellon University for leave to file amicus brief in support of WesternGeco L.L.C. on petition for en banc rehearing [100]. Response/Opposition is due 08/27/2015 [Consent: partial consent]. Service: 08/12/2015 by email. [263694]
08/12/2015	107	TENDERED from Carnegie Mellon University Title: AMICUS CURIAE BRIEF. Service: 08/12/2015 by email. [263697]
***		
08/19/2015	109	ORDER filed granting motion to file amicus brief on en banc or rehearing petition [106]. By: (Per Curiam). Service as of this date by Clerk of Court. [265565]
08/19/2015	110	AMICUS BRIEF FILED on Petition for Carnegie Mellon University. Pages: 9. Pursuant to ECF-10(D), the filer is directed to submit the appropriate number of copies within two days. [265579]

JA 10

08/20/2015	111	The court invites a response from Appellant ION Geophysical Corporation to the petition for en banc rehearing filed by Cross-Appellant in 13-1527. [265664]
***		
09/03/2015	114	RESPONSE of Appellant ION Geophysical Corporation to the petition for en banc rehearing [100] filed by Cross-Appellant WesternGeco L.L.C. in 13-1527. Service: 09/03/2015 by email. [269565]
10/30/2015	115	ORDER filed denying [100] petition for en banc rehearing filed by WesternGeco L.L.C. By: En Banc (Per Curiam). Service as of this date by Clerk of Court. [284727]
11/06/2015	116	Mandate issued to the United States District Court for the Southern District of Texas. Service as of this date by Clerk of Court. [286918] [13-1527, 14-1121, 14-1526, 14-1528] Mandate recalled pursuant to 07/25/2016 court order [127]
***		
02/26/2016	123	Petition for writ of Certiorari filed on 02/26/2016 in the Supreme Court of the United States. Supreme Court #: 15-

JA 11

		1085, WesternGeco L.L.C. v. ION Geophysical Corporation. [314818]
***		
06/20/2016	125	The petition for writ of certiorari, [15-1085], was Granted on 06/20/2016. The judgment or decision is Vacated and Remanded. [345230]
07/22/2016	126	Certified judgment of the Supreme Court of the United States issued on 06/20/2016 for 15-1085. [352862]
07/25/2016	127	ORDER filed recalling mandate; reopening appeal; vacating the Precedential Opinion [97]. By: (Per Curiam). Service as of this date by Clerk of Court. [353274] [13-1527, 14-1121, 14-1526, 14-1528]
***		
08/22/2016	129	MOTION of Cross-Appellant WesternGeco L.L.C. To Remand. Response/Opposition is due 09/06/2016 [Consent: opposed]. Service: 08/22/2016 by email. [360893]
09/06/2016	130	RESPONSE of Appellant ION Geophysical Corporation to the motion for other relief [129] filed by Cross-Appellant WesternGeco

JA 12

		L.L.C. in 13-1527. Service: 09/06/2016 by email. [364551]
09/15/2016	131	REPLY of Cross-Appellant WesternGeco L.L.C. to response filed by Appellant in 13-1527 , Doc. No [130]. Service: 09/15/2016 by email. [366587]
09/21/2016	132	OPINION and JUDGMENT filed. The judgment or decision is: Affirmed-in-part, Reversed-in-part, Vacated-in-part, and Remanded. Denying as moot motion to remand [129] filed by Cross-Appellant WesternGeco L.L.C. in 13-1527; (Precedential Opinion). (For the Court: Dyk,Circuit Judge; Wallach,Circuit Judge and Hughes,Circuit Judge). Opinion dissenting in part filed by Circuit Judge Wallach. [368011] [13-1527, 14-1121, 14-1526, 14-1528]
***		
10/14/2016	136	ORDER granting motion to issue mandate [133] filed by Cross-Appellant WesternGeco L.L.C. in 13-1527; issuing mandate in 13-1527, 14-1121, 14-1526, 14-1528. Service as of this date by Clerk of Court. [374531] [13-1527, 14-1121, 14-1526, 14-1528]
***		

JA 13

02/17/2017	138	Petition for writ of Certiorari filed on 02/17/2017 in the Supreme Court of the United States. Supreme Court #: 16-1011, WesternGeco L.L.C. v. ION Geophysical Corporation. [409362] [13-1527, 14-1121, 14-1526, 14-1528]
01/17/2018	139	The petition for writ of certiorari, [16-1011], filed on 02/17/2017, was Granted on 01/12/2018. [490131]



JA 14

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

\_\_\_\_\_  
No. 4:09-cv-01827  
\_\_\_\_\_

WESTERNGECO LLC

v.

ION GEOPHYSICAL CORPORATION

\_\_\_\_\_  
**DOCKET ENTRIES**

Date Filed	#	Docket Text
06/12/2009	1	COMPLAINT against ION Geophysical Corporation (Filing fee \$ 350 receipt number 0541000000005147763) filed by WesternGeco LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Civil Cover Sheet)(Kaplan, Lee) (Entered: 06/12/2009)
***		
06/16/2009	6	ANSWER to 1 Complaint, with Jury Demand, COUNTERCLAIM against WesternGeco LLC by ION Geophysical Corporation, filed. (Attachments: # 1 Exhibit A (Confidential Disclosure

JA 15

		Agreement), # 2 Exhibit B— Amendment dated December 8, 1997, # 3 Exhibit C—992 Patent)(Burgert, David) (Entered: 06/16/2009)
***		
07/09/2009	14	ANSWER to 6 Answer to Complaint, Counterclaim,, with Jury Demand by WesternGeco LLC, filed. (Attachments: # 1 Affidavit of Lee Kaplan)(Kaplan, Lee) (Entered: 07/09/2009)
***		
07/16/2010	120	MEMORANDUM AND ORDER. (Signed by Judge Keith P Ellison) Parties notified. (sloewe) (Entered: 07/16/2010)
***		
03/14/2011	145	AMENDED Complaint with Jury Demand against Fugro (USA), Inc., Fugro Geoservices, Inc., Fugro Inc, Fugro Norway Marine Services AS, Fugro-Geoteam AS, Fugro-Geoteam Inc. filed by WesternGeco LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D, # 5 Exhibit E, # 6 Exhibit F, # 7 Exhibit G)(Kaplan, Lee) (Entered: 03/14/2011)
***		

08/26/2011	165	ANSWER to 145 Amended Complaint/Counterclaim/Crossclaim etc., with Jury Demand by Fugro (USA), Inc., Fugro Geoservices, Inc., Fugro-Geoteam Inc., Fugro Norway Marine Services AS, Fugro Inc, Fugro-Geoteam AS, COUNTERCLAIM against Plaintiff by Fugro-Geoteam Inc., filed.(Saunders, Jason) Filers corrected on 8/29/2011 (ltien, ). (Entered: 08/26/2011)
***		
06/29/2012	372	MEMORANDUM AND ORDER GRANTING IN PART AND DENYING IN PART Doc. 276 (Signed by Judge Keith P Ellison) Parties notified. (sloewe ) (Entered: 06/29/2012)
***		
07/13/2012		Minute Entry for proceedings held before Judge Keith P Ellison. FINAL PRETRIAL CONFERENCE held on 7/13/2012. Rulings made on the record. Appearances:(Law Clerk: Emerson). James M Thompson, Jason Allan Saunders, David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court

		Reporter: Malone), filed.(sloewe) (Entered: 07/13/2012)
07/16/2012	402	MEMORANDUM AND ORDER granting in part denying in part 350 Sealed Event, granting in part denying in part 356 Sealed Event (Signed by Judge Keith P Ellison) Parties notified. (arrivera, ) (Entered: 07/16/2012)
***		
07/23/2012		Minute Entry for proceedings held before Judge Keith P Ellison. FIRST day of JURY TRIAL held on 7/23/2012 terminated 409 Sealed Event, denying 422 Sealed Event. Trial resumes at 7:30 a.m. Appearances:(Law Clerk: Emerson) Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Malone/Sanchez), filed.(sloewe ) (Entered: 07/23/2012)
***		

<p>07/24/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. SECOND day of JURY TRIAL held on 7/24/2012. Testifying witnesses: Thomas Scoulios, Simon Bittleston. Plaintiff's Admitted Exhibits: 1-3, 5, 95, 594, 766, 126, 764, 770, 767, 746, 73, 85, 56, 98, 50, 32. Deft's Exhibits: 47, 55, 224,225, 229, 234 977, 1019, 758(a) and 758(b) ONLY. FOR THE RECORD ONLY: Bittleston DEMO001-24 and Scoulios DEMO001-11, Scoulios Demo 10. Trial resumes tomorrow at 7:30 a.m. Appearances:(Law Clerk: Emerson) Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Malone / Sanchez), filed.(sloewe) Modified on 7/25/2012 (sloewe). Modified on 7/31/2012 (sloewe, ). (Entered: 07/24/2012)</p>
<p>***</p>	

<p>07/25/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. THIRD day of JURY TRIAL held on 7/25/2012. Testifying witness: Dr. Simon Bittleston. Admitted Plaintiff Exhibits: 65, 58. Admitted Defendant Fugro Exhibits: 65, 20, 22, 16, 46, 90, 350, 62, 479, 24, 408, 889 (over objection). Admitted Ion Ion Exhibit 54 (WG0024535-57 only), 156 (3 photos only). Admitted Demonstrative Exhibit for the record only FD001, and WG 1A-(the modification of FD001). Trial resumes at 7:30 a.m. tomorrow. Appearances:(Law Clerk: Joelle Emerson) (Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Malone), filed.(sloewe) Modified on 7/26/2012 (sloewe). Modified on 8/13/2012 (sloewe, ). (Entered: 07/25/2012)</p>
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07/26/2012		<p>Minute Entry for proceedings held before Judge Keith P Ellison. FOURTH day of JURY TRIAL held on 7/26/2012. Testifying witnesses: Mark Zajac, and Leif Morten By. Admitted Plaintiff Exhibits: 474, 636, 295, 429, 296, 297, 322, 1004, 290, 403, 380, 492, 1008, 333, 1017, 1018, 18, 19, 512, 20, 1019, 1000, 1002, 1003 and 460. ION Admitted Exhibits: 66, 204, 71, 77, 78, 81, 82, 80, and 100. Defendant Fugro's Exhs: 852, 123, and 1124. For the record only the following Demonstrative Exhibits are ADMITTED: FD By Demo 001 FD by Demo 002, FD Video 01, FD Video 02, FD Video 03, FD Video 04, FD Demo 002. Trial resumes at 7:30 a.m. tomorrow. Appearances:(Law Clerk: Joelle Emerson) (Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg</p>

		<p>LoCascio.(Court Reporter: Sanchez ALL DAY), filed.(sloewe) Modified on 7/27/2012 (sloewe). Modified on 7/27/2012 (sloewe). Modified on 7/31/2012 (sloewe). (Entered: 07/26/2012)</p>
<p>***</p>		
<p>07/27/2012</p>		<p>Minute Entry for proceedings held before Judge Keith P Ellison. FIFTH day of JURY TRIAL held on 7/27/2012. Testifying witnesses: Leif Morten By, Dr. Michael Triantafyllou, Dr. John Leonard. Admitted Plaintiff Exhibits: 27, 44, 008, 009, 117, 120, 206, 227, 509, 8, 171, 273, 274, 282, and 561. ION's Admitted Exhibits: Ex 1. Plaintiff's Dem. Exhibits for the record ONLY: PTX 35, and FD0231, FD0260, and FD0218. WG By Demo 1, Triantafyllou 001-092, ION's T1-T7, T9, T12, T17, T19, ION DEMO. 3, ION DEMO 4, Fugro-Geoteam Dr. T1, Leonard DEMO001-11 Appearances:.(Law Clerk: Joelle Emerson) (Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan</p>



	<p>Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Sanchez ALL DAY). Trial resumes at 7:15 a.m., filed.(sloewe) Modified on 7/31/2012 (sloewe). Modified on 7/31/2012 (sloewe). (Entered: 07/27/2012)</p>
<p>***</p>	
<p>07/30/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. SIXTH day of JURY TRIAL held on 7/30/2012. Testifying witnesses: Robin Walker by Deposition Paul Winspear. Admitted Plaintiff Exhibits: 114, 547, 742, 94, 594, 543, 822, 132. ION's Exhibits: 259, 260, 258, 263, 274, 99, 178, 269,268, 74, 229, 271, 207. Fugro's Admitted Exhibits: 1027, 1046, 1047, and 265. Demonstrative Exhibits FOR THE RECORD ONLY admitted: FD Walker Demo 001, and FD Walker Demo 002, Walker DEMO001-22, Walker Demo 1A and 2A, Walker ION Demo 1, 2, and 3, Demo 20A, Demo 21A, and</p>

	<p>Demo 22A, PTX 126, 128  Appearances:Law Clerk: Joelle Emerson) (Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Sanchez/Malone), filed.(sloewe) Modified on 7/31/2012 (sloewe ). (Entered: 07/30/2012)</p>
<p>***</p>	
<p>07/31/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. SEVENTH day of JURY TRIAL held on 7/31/2012. Paul Winspear by deposition, David Moffat by deposition, Crawford McNabb by deposition, Glenn Morton, Jeffrey Cunkelman, Ronny Bohn, and Dale Lambert by deposition, Ray Sims. Plaintiff's Admitted Exhibits: 20, 28, 6, 9, 206, 214, 359, 485 247 306, 398, 214 213,6,463, 290, 343, 16, PTX 12, 13, 14, 15, 17, 18, 22, 23, 25, 30, 32, 45, 48, 49, 319, 342,</p>

	<p>364, 388, 416, 486. ION's 178. For the RECORD ONLY: WG MORTON DEMO001-014, WG Sims Demo 001-032, Morton Demo IA to the Record Only. Trial will resume at 7:30 tomorrow morning. Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Sanchez / Malone), filed.(sloewe) Modified on 8/13/2012 (sloewe). (Entered: 07/31/2012)</p>
<p>***</p>	
<p>08/01/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. EIGHTH day of JURY TRIAL held on 8/1/2012. Testifying witness: Ray Sims. Admitted Plaintiff Exhibits: 6, 7, 14, 58, 1, 17, 28, 32, 94, 164, 197, 214, 230, 233, 245, 250, 257, 261, 309, 312, 313, 359, 363, 364, 365, 375, 380, 385, 386, 388, 394, 398,</p>

	<p>403, 425, 429, 457, 463, 473, 485, 486, 492, 507, 543, 544, 571, 594,650, 655, 680, 682, 724, 725, 742, 822, 834, 835 857, 902, 903, 920, 938, 941, 942, 943, 944, 945, 458. ION EXHIBIT 269. FUGRO EXHIBITS: 228, 234, 236, 237, 240, 241, 258, 259, 266, 267, 273, 276, and 277 1087, 1086, 1018, 571, 1136, 1050, 0291, FD0213, FD0240, FD0279, FD1029. FOR THE RECORD ONLY: Plaintiff's Sims Demo 001a Sims Demo 32-106, FD Sims 01-06. TRIAL RESUMES AT 7:30 tomorrow morning. Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Sanchez / Malone), filed.(sloewe) Modified on 8/2/2012 (sloewe). Modified on 8/2/2012 (sloewe, ). Modified on 8/13/2012 (sloewe, ). (Entered: 08/01/2012)</p>
<p>***</p>	

08/02/2012		<p>Minute Entry for proceedings held before Judge Keith P Ellison. NINTH day of JURY TRIAL held on 8/2/2012. :(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio. Plaintiff rests. Several judgments of a matter of law filed and held. Testifying witness: Ray Sims, Helen Christensen, David Gentle, KEvin douglas Stiver, David Moffat. Appearances:(Court Reporter: Malone), filed.(sloewe ) (Entered: 08/02/2012)</p>
***		
08/03/2012		<p>Minute Entry for proceedings held before Judge Keith P Ellison. TENTH day of JURY TRIAL held on 8/3/2012. David Moffat, Thomas Edgar, Andre Oliviere, Oyvind Hillesund. PTX 22, 26, 32, 38, 250, 350, 360, 436, 441, 473, 483, 484, 571, 880, 922A, 922B, 1022, 1023, FD 242,</p>

	<p>278, 279, 291, 1136. ION ADMITTED EXHIBITS: 125, 252, 129, 397, 189, 338, 360. FOR THE RECORD ONLY: ION 11. Moffat Demo 1-20. WG Moffat Demo 1, WG Moffat Demo 2, WG Moffat Demo 3. Appearances::(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Sanchez / Malone), filed.(sloewe) Modified on 8/9/2012 (sloewe). (Entered: 08/06/2012)</p>
<p>***</p>	
<p>08/07/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. ELEVENTH day of JURY TRIAL held on 8/7/2012. Crawford McNab, Dane Seale, Oyvind Hillesund, Charles J. Ledet, Kenneth Eugene Welker, James Martin, and Robert Brune. Admitted Plaintiff Exhibits: 9 206, 008, 269, 389,</p>

	<p>934. Admitted ION Exhibits: 54, 138, 152, 248, 130, 453A, 337A, 303, 130, 125, 177 64. Admitted Fugro Exhibits: 774, 775, 555, 558. Trial resumes at 7:30 a.m. Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio..(Court Reporter: Sanchez / Malone)., filed.(sloewe)</p>
<p>***</p>	
<p>08/08/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. TWELVTH day of JURY TRIAL held on 8/8/2012. Robert Brune, and Kenneth Williams. ADMITTED PLAINTIFF EXHIBITS: 44, 237, Admitted ION Exhibits: 19, 266, 18. Trial resumes at 7:30 tomorrow morning. Appearances:Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon</p>

		<p>Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio., filed.(sloewe) (Entered: 08/08/2012)</p>
<p>***</p>		
<p>08/09/2012</p>		<p>Minute Entry for proceedings held before Judge Keith P Ellison. THIRTEENTH day of JURY TRIAL held on 8/9/2012. Testifying witnesses: Kenneth Williamson, Phillip Lunde, David Gentle, Robert Peebler. Admitted Plaintiff's Exhibits:22, 23, 38, 39, 875, 948,947, 949, 950,38, 39, 71, 164, 161, 162, 242, 244, 946. ION's Admitted Exhibits: 252, 126, 125, 304. Jury Charge Conference at 8:15 a.m. no Jury. Jury Trial resumes Monday at 7:30 a.m. Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce,</p>



		Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio., filed.(sloewe) Modified on 8/13/2012 (sloewe). (Entered: 08/09/2012)
***		
08/13/2012		Minute Entry for proceedings held before Judge Keith P Ellison. FOURTEENTH day of JURY TRIAL held on 8/13/2012. Testifying witnesses: Robert Peebler, Jens Olav Paulsen by Depo, Atle Jacobsen by Depo, Julie Margaret Branton by Depo, Kayleen Robinson by depo, Lance Gunderson. Exhibit Objections, and Final Charge Conference Appearances:(Court Reporter: Malone / Sanchez), filed.(sloewe, ) (Entered: 08/13/2012)
***		
08/13/2012	525	ORDER granting Joint Motion and Stipulation of Dismissal. (Fugro-Geoteam Inc., Fugro-Geoteam Inc. and Fugro-Geoteam AS terminated). (Signed by Judge Keith P Ellison) Parties notified. (bthomas, ) (Entered: 08/15/2012)
***		
08/14/2012		Minute Entry for proceedings held before Judge Keith P

		Ellison. FIFTEENTH day of JURY TRIAL held on 8/14/2012. Testifying Witness: Lance Gunderson. Plaintiff's Admitted Exhibits: 25, 514, 166, 164, 315, 492, 6, 952, 197, 313, 247, 250, 233, 951, 131A, 954, 471, 680, 655. ION's 125, 8 and Fugro's 407. Appearances::(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio.(Court Reporter: Malone / Sanchez), filed.(sloewe) (Entered: 08/14/2012)
***		
08/14/2012	530	Jury Charge, filed.(sloewe) (Entered: 08/15/2012)
***		
08/15/2012		Minute Entry for proceedings held before Judge Keith P Ellison. SIXTEENTH day of JURY TRIAL held on 8/15/2012. CERTIFICATION OF EXHIBITS. CLOSING ARGUMENTS. JURY

	<p>DELIBERATES. Appearances: (Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg LoCascio., filed.(sloewe ) (Entered: 08/17/2012)</p>
<p>***</p>	
<p>08/16/2012</p>	<p>Minute Entry for proceedings held before Judge Keith P Ellison. SEVENTEENTH day of JURY TRIAL held on 8/16/2012. JURY DELIBERATES. QUESTION 1 ASKED AND ANSWERED. JURY REACHED VERDICT. VERDICT FOR PLAINTIFF. Appearances:(Law Clerk: Joelle Emerson) Leslie Schmidt, Michael Streich Christine Raborn, Gordon Arnold, Eric Wade, Jonna Stallings, Susan Hellinger, Tom Scoulios, Raymond Sims,. David Lee Burgert, Ray Thomas Torgerson, Jonathan M Pierce, Sarah K. Tsou, Lee L Kaplan, Timothy K Gilman, Gregg</p>

		LoCascio. COURT REPORTER MAYRA MALONE., filed.(sloewe) (Entered: 08/17/2012)
***		
08/16/2012	536	JURY VERDICT in favor of WesternGeco LLC, filed. (bthomas, ) (Additional attachment(s) added on 8/17/2012: # 1 unredacted) (bthomas, ). (Entered: 08/17/2012)
***		
06/19/2013	634	MEMORANDUM AND ORDER DENYING 562 MOTION for <i>JMOL, Motion for New Trial on Damages alternatively Motion for Remittitur</i> Judgment, DENYING 552 MOTION for New Trial, 565 MOTION to Dismiss <i>for Lack of Subject Matter Jurisdiction</i> , DENYING 609 Opposed MOTION to Compel Production of Documents from Plaintiff WesternGeco LLC, 555 Sealed Event, GRANTING 559 MOTION for <i>Entry of Findings and Conclusions of No Willful Infringement, Renewed Motion for Judgment as a Matter of Law of No Willful Infringement, and Alternative Motion for New Trial</i> Judgment, DENYING 557

		MOTION for New Trial, 550 MOTION for New Trial, DENYING 561 MOTION for <i>JMOL and New Trial Due to Incorrect Claim Construction</i> Judgment (Signed by Judge Keith P Ellison) Parties notified.(sloewe) (Entered: 06/19/2013)
***		
10/24/2013	661	Sealed Order, filed. (Entered: 10/24/2013)
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04/23/2014	685	Sealed Event, filed. (With attachments) (Entered: 04/23/2014)
04/30/2014	686	Sealed Order, filed. (Entered: 04/30/2014)
05/07/2014	687	FINAL JUDGMENT. Case terminated on 05/07//2014(Signed by Judge Keith P Ellison) Parties notified.(sloewe, 4) (Entered: 05/07/2014)
***		
03/14/2017		Minute Entry for proceedings held before Judge Keith P Ellison. MOTION HEARING held on 3/14/2017 751 Sealed Event. After hearing arguments from the parties, WesternGeco's

		Motion for Enhanced Damages granted. ION ordered to pay five million dollars in enhanced damages. Appearances: Jarrod Wayne Stone, David J Healey, Justin M Barnes, Brian Gregory Strand, Lee L Kaplan, Timothy K Gilman, Gregg F. LoCascio, Leslie M. Schmidt.(Court Reporter: M. Malone), filed.(arrivera, 4) (Entered: 03/17/2017)
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07/26/2017	770	FINAL JUDGMENT. Case terminated on July 26th, 2017. (Signed by Judge Keith P Ellison) Parties notified.(rosaldana, 4) (Entered: 07/26/2017)

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

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No. 4:09-cv-01827

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WESTERNGECO LLC,  
*Plaintiff,*

v.

ION GEOPHYSICAL CORPORATION  
*Defendant.*

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**JURY INSTRUCTIONS**

**INSTRUCTION NO. 1**

**GENERAL INSTRUCTIONS**

**MEMBERS OF THE JURY:**

You have heard the evidence in this case. I will now instruct you on the law that you must apply. It is your duty to follow the law as I give it to you. On the other hand, you the jury are the judges of the facts. Do not consider any statement that I have made in the course of trial or make in these instructions as an indication that I have any opinion about the facts of this case.

Answer each question from the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

When instructed, you will answer questions based upon the preponderance of the evidence. By this is meant the greater weight and degree of credible evidence before you. In other words, a preponderance of the evidence just means the amount of evidence that persuades you that a claim is more likely so than not so. In determining whether any fact has been proved by a preponderance of the evidence in the case, you may, unless otherwise instructed, consider the testimony of all witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them.

You will answer some questions based upon clear and convincing evidence. Clear and convincing evidence is evidence that produces in your mind a firm belief or conviction as to the matter at issue. This involves a greater degree of persuasion than is necessary to meet the preponderance of the evidence standard; however, proof to an absolute certainty is not required.

You must decide whether the testimony of each of the witnesses is truthful and accurate, in part, in whole, or not at all. You also must decide what weight, if any, you give to the testimony of each witness.

In evaluating the testimony of any witness, you may consider, among other things:

- the ability and opportunity the witness had to see, hear, or know the things that the witness testified about;
- the witness's memory;
- any interest, bias, or prejudice the witness may have;
- the witness's intelligence;



- the manner of the witness while testifying; and
- the reasonableness of the witness's testimony in light of all the evidence in the case.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact, or whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony the witness gave before you during the trial.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it, because people may forget some things or remember other things inaccurately. So, if a witness has made a misstatement, you need to consider whether that misstatement was an intentional falsehood or simply an innocent lapse of memory; and the significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case.

The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

There are two types of evidence that you may consider in properly finding the truth as to the facts in the case. One is direct evidence—such as testimony of an eyewitness. The other is indirect or circumstantial evidence—the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence but simply requires that you find the facts from a preponderance of all the evidence, both direct and circumstantial.

When knowledge of technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field—called an expert witness—is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether to rely upon it.

In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness, including any bias you may infer from evidence that the expert witness has been or will be paid for reviewing the case and testifying or from evidence that he testifies regularly as an expert witness and his income from such testimony represents a significant portion of his income.

JA 40

Any notes that you have taken during this trial are only aids to memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. The notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

INSTRUCTION NO. 2  
SUMMARY OF CONTENTIONS

As you have observed, the parties in this case are Plaintiff WesternGeco L.L.C. and Defendant ION Geophysical Corporation. Throughout these instructions, I will refer to WesternGeco L.L.C. as WesternGeco and ION Geophysical Corporation as ION.

I will now summarize the issues that you must decide and for which I will provide instructions to guide your deliberations. You must decide the following four main issues:

(1) Whether WesternGeco has proven by a preponderance of the evidence that ION has infringed the following claims:

- Claims 18,<sup>1</sup> 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

(2) Whether ION has proven by clear and convincing evidence that the following are invalid:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent

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<sup>1</sup> Note that, though I have already found that ION infringes Claim 18 of the '520 Patent under 35 U.S.C. § 271(f)(1), you still must decide whether Claim 18 is infringed under 35 U.S.C. § 271(f)(2).

- Claim 14 of the '038 Patent.

(3) For any claims that are infringed and are not invalid, you will then need to make a finding as to whether the infringement was willful.

(4) Finally, if you decide that any claim has been infringed and is not invalid, you will also need to decide the money damages to be awarded to WesternGeco to compensate it for the infringement that WesternGeco has proved by a preponderance of the evidence. If you decide that any infringement was willful, that decision should not affect any damages award you make. I will take willfulness into account later.

INSTRUCTION NO. 3

ROLE OF THE CLAIMS OF A PATENT

Before you can decide many of the issues in this case, you will need to understand the role of patent “claims.” The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent’s coverage. That is, the claims are intended to define, in words, the boundaries of the invention. Only the claims of the patent can be infringed. Neither the written description nor the drawings of a patent can be infringed. Each of the claims must be considered individually. You must use the same claim meaning for both your decision on infringement and your decision on invalidity. Each claim is effectively treated as if it was a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends, in turn, on what each of its claims covers.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid. The law says that it is my role to define the terms of the claims, and it is your role to apply my definitions to the issues that you are asked to decide in this case. Therefore, as I explained to you at the start of the case, I have determined the meaning of the claims, and I will provide to you my definitions of certain claim terms. You must accept my definitions

JA 44

of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including the issues of infringement and validity.

INSTRUCTION NO. 4

HOW A CLAIM DEFINES WHAT IT COVERS

I will now explain how a claim defines what it covers. A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a system satisfies each of these requirements, then it is covered by the claim. The beginning or preamble of the patent claims at issue use the word “comprising.” Comprising means “including or containing but not limited to.” That is, if you decide that a system includes all the requirements in a claim, that claim is infringed. This is true even if the accused product includes components in addition to those requirements. For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table’s legs.

There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim-by-claim. In patent law, the requirements of a claim are often referred to as “claim elements” or “claim limitations.” When a thing (such as a system) meets all of the requirements of a claim, the claim is said to “cover” that thing, and that thing is said to “fall” within the scope of that claim. In other words, a claim covers a system where each of the claim elements or limitations is present in that system.



INSTRUCTION NO. 5

INDEPENDENT AND DEPENDENT CLAIMS

This case involves two types of patent claims: independent claims and dependent claims. An “independent claim” sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, the following claims are independent claims:

- Claim 18 of the ‘520 Patent
- Claim 15 of the ‘967 Patent
- Claim 15 of the ‘607 Patent
- Claim 14 of the ‘038 Patent.

The remainder of the asserted claims in the patents are “dependent claims.” Claims 19 and 23 of the ‘520 patent are dependent on Claim 18 of the ‘520 patent. A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way, the claim “depends” on another claim. A dependent claim incorporates all of the requirements of the claims to which it refers. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers. A system that meets all of the requirements of both the dependent claim and the claims to which it refers is covered by that dependent claim.

INSTRUCTION NO. 6  
CLAIM CONSTRUCTION

I will now explain to you the meaning of some of the words of the claims in this case. In doing so, I will explain some of the requirements of the claims. As I have previously instructed you, you must accept my definition of these words in the claims as correct. You were provided with these definitions in your juror notebooks. For any words in the claim for which I have not provided you with a definition, you should apply their ordinary meaning. You should not take my definition of the language of the claims as an indication that I have a view regarding how you should decide the issues that you are being asked to decide, such as infringement and invalidity. These issues are yours to decide.

CLAIM TERM	COURT’S CONSTRUCTION
“streamer positioning device(s)”; “the positioning device”	a device that controls the position of a streamer as it is towed ( <i>e.g.</i> , a “bird”)
“global control system”	a control system that sends commands to other devices in a system ( <i>e.g.</i> , local control systems)
“local control system”	a control system located on or near the streamer position devices ( <i>e.g.</i> , birds)
“location information”	information regarding location

JA 48

<p>“a control system configured to use a control mode selected from a feather angle mode, a turn control mode, a streamer separation mode, and two or more of these modes”</p>	<p>a control system configured to use one or more control modes selected from a feather angle mode, a turn control mode, a streamer separation mode, and two or more of these modes</p>
<p>“feather angle mode”</p>	<p>a control mode that attempts to set and maintain each streamer in a straight line offset from the towing direction by a certain feather angle</p>
<p>“turn control mode”</p>	<p>mode wherein streamer positioning device(s) generate a force in the opposite direction of a turn and then directing each streamer positioning device to the position defined in the feather angle mode</p>
<p>“streamer separation mode”</p>	<p>a control mode that attempts to set and maintain the spacing between adjacent streamers</p>
<p>“at least some”</p>	<p>more than one</p>

<p>“active streamer positioning device (ASPD)”</p>	<p>a device capable of controlling the vertical and horizontal position of the seismic streamer</p>
<p>“master controller”</p>	<p>a controller that sends commands to other devices in a system</p>
<p>“the master controller”</p>	<p>a master controller</p>
<p>“positioning commands”</p>	<p>signals or instructions to control positioning</p>
<p>“maintaining a specified array geometry”</p>	<p>maintaining a specified array shape</p>
<p>“environmental factors”;  “environmental influences”;  “environmental measurements”</p>	<p>environmental factors or influences such as wind speed and direction; tidal currents velocity and direction; ocean bottom depth/angle; local current velocity and direction; wave height and direction; ocean bottom depth/angle; and water temperature and salinity</p>

INSTRUCTION NO. 7

PERSON OF ORDINARY SKILL IN THE ART

From time to time, you will be asked to consider the person of ordinary skill in art. The person of ordinary skill is presumed to know all prior art that you have determined to be reasonably relevant. The person of ordinary skill is also a person of ordinary creativity that can use common sense to solve problems.

When determining the level of ordinary skill in the art, you should consider all the evidence submitted by the parties, including evidence of:

- (1) The levels of education and experience of the inventor and other persons actively working in the field;
- (2) The types of problems encountered in the field;
- (3) Prior art solutions to those problems;
- (4) Rapidity with which innovations are made;  
and
- (5) The sophistication of the technology.

INSTRUCTION NO. 8  
INFRINGEMENT GENERALLY

I will now instruct you how to decide whether or not ION has infringed the asserted patents. Infringement is assessed on a patent-by-patent, claim-by-claim basis. Therefore, there may be infringement as to one claim but no infringement as to another. To prove that an accused system is a patented invention, WesternGeco must prove that the accused system literally infringes the patent claim or infringes the patent claim under the doctrine of equivalents. In this case, there are two possible ways ION may be liable for infringement. These two ways are: (1) infringement through supplying or causing to be supplied components in or from the United States for combination abroad under 35 U.S.C. § 271(f)(1); and (2) infringement through supplying or causing to be supplied one component in or from the United States for combination abroad under 35 U.S.C. § 271(f)(2).

In order to prove infringement, WesternGeco must prove that the requirements for one or more of these types of infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that all of the requirements of one or more of each of these types of infringement have been proved. In deciding the question of infringement, you may not compare ION's products and services to WesternGeco's products and services. Instead, you must compare the accused system to the claims at issue.

I will now explain each of these types of infringement in more detail.

INSTRUCTION NO. 9  
LITERAL INFRINGEMENT

To determine whether a system literally infringes a system/apparatus claim, you must compare the accused system with each system/apparatus claim that WesternGeco asserts is infringed. A patent claim for a system or apparatus is literally infringed only if the accused system includes each and every element in that patent claim. If the system does not contain one or more elements recited in a claim, the system does not literally infringe that claim.

WesternGeco asserts that the following claims are literally infringed:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

INSTRUCTION NO. 10  
INFRINGEMENT UNDER THE  
DOCTRINE OF EQUIVALENTS

If a system does not literally meet all of the requirements of a claim and thus does not literally infringe that claim, that system may nonetheless be the patented invention and infringe if that system satisfies the claim under the “doctrine of equivalents.”

Under the doctrine of equivalents, a system infringes a claim if the accused system performs steps or contains elements corresponding to each and every requirement of the claim that is equivalent to, even though not literally met by, the accused system. You may find that an element or step is equivalent to a requirement of a claim that is not met literally if a person having ordinary skill in the field of technology of the patent would have considered the differences between them to be “insubstantial” or would have found that the structure: (1) performs substantially the same function (2) in substantially the same way (3) to achieve substantially the same result as the requirement of the claim. In order for the structure to be considered interchangeable, the structure must have been known at the time of the alleged infringement to a person having ordinary skill in the field of technology of the patent. Interchangeability at the present time is not sufficient.

In order to prove infringement by “equivalents,” WesternGeco must prove the equivalency of the structure to a claim element by a preponderance of the evidence.



JA 54

WesternGeco asserts that the following claims are infringed under the doctrine of equivalents if they are not literally infringed:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent

INSTRUCTION NO. 11  
INFRINGEMENT THROUGH THE SUPPLY OF  
COMPONENTS IN OR FROM THE UNITED  
STATES FOR COMBINATION ABROAD UNDER  
35 U.S.C. § 271(f)(1)

WesternGeco alleges that ION infringed the following claims by supplying or causing to be supplied all or a substantial portion of the components of the patented system from the United States and actively inducing the assembly of those components into a system that would infringe the claims if they had been assembled in the United States:

- Claims 19 and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

In order to prevail on its infringement claims under 35 U.S.C. § 271(f)(1), WesternGeco must prove by a preponderance of the evidence that:

- (1) ION supplied or caused to be supplied from the United States a substantial portion of the components of the claimed invention;
- (2) ION intended that the components be combined outside the United States; and
- (3) The combination of those components would infringe the claim if such combination occurred in the United States.

You must accept my finding on infringement as it relates to Claim 18 of the '520 Patent under 35 U.S.C. § 271(f)(1). Specifically, I have already determined that ION has supplied or caused to be supplied from the United States a substantial portion of the

components—which I found to be the DigiFIN and the Lateral Controller—of the patented invention of Claim 18 of the ‘520 Patent. I also have already found that ION intended those components to be combined outside of the United States in a manner that would infringe the patent if the combining had been done in the United States.

In evaluating whether ION infringes the other asserted claims, you must accept my finding that ION intended the DigiFIN and the Lateral Controller to be combined outside of the United States.

You must determine infringement under 35 U.S.C. § 271(f)(1) on a claim-by-claim basis.

INSTRUCTION NO. 12  
INFRINGEMENT THROUGH THE SUPPLY OF  
ONE COMPONENT IN OR FROM UNITED  
STATES FOR COMBINATION ABROAD UNDER  
35 U.S.C. § 271(f)(2)

WesternGeco alleges that ION infringed the following claims by supplying, or causing to be supplied, a component of the patented system from the United States, where the component was especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

In order to prevail on its infringement claims under 35 U.S.C. § 271(f)(2), WesternGeco must prove by a preponderance of the evidence that:

- (1) ION supplied or caused to be supplied from the United States a component of the claimed invention;
- (2) The component is not a staple article or commodity of commerce suitable for substantial non-infringing use;
- (3) The component is especially made or especially adapted for use in the claimed invention;

(4) ION knew that the component is especially made or especially adapted for use in the claimed invention; and

(5) ION knew that the intended combination is patented and that the combination would be infringing if it occurred in the United States.

You must determine infringement under 35 U.S.C. § 271(f)(2) on a claim-by-claim basis.

INSTRUCTION NO. 13  
INVALIDITY—BURDEN OF PROOF

I will now instruct you on the rules you must follow in deciding whether or not ION has proven that the following claims are invalid:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

Patents are presumed valid. To prove that any claim of a patent is invalid, ION must persuade you by clear and convincing evidence, *i.e.* you must be left with a clear conviction that the claim is invalid.

INSTRUCTION NO. 14  
ANTICIPATION

In order for someone to be entitled to a patent, the invention must actually be “new.” In general, inventions are new when the identical system has not been made, used, or disclosed before.

In this case, ION contends that the following claims are anticipated and thus invalid:

- Claim 18 of the ‘520 Patent
- Claim 15 of the ‘607 Patent
- Claim 14 of the ‘038 Patent.

ION must convince you of this by clear and convincing evidence that the claim(s) is/are invalid. You must consider anticipation on a claim-by-claim basis.

In considering whether the claimed invention was anticipated, you should consider the following prior art:

As to the ‘520 Patent:

- U.S. Patent No. 5,790,472 (referred to as the “Workman Patent”)

As to the ‘607 Patent:

- U.S. Patent No. 5,790,472 (referred to as the “Workman Patent”)

As to the ‘038 Patent:

- International Application WO 00/20895 (referred to as the “895 Application”).

The parties agree that the foregoing patents and publications are prior art.

For a particular piece of prior art to anticipate a patent claim, it must expressly or inherently disclose each element of the claimed invention to a person of ordinary skill in the art. The disclosure must be complete enough to enable one of ordinary skill in the art to practice the invention without undue experimentation. In determining whether the prior art is enabling for the '520 Patent and the '607 Patent, you should take into account what would have been within the knowledge of a person of ordinary skill in the art on October 1, 1998. In determining whether the prior art is enabling for the '038 Patent, you should take into account what would have been within the knowledge of a person of ordinary skill in the art on June 15, 2001. You may consider evidence that sheds light on the knowledge such a person would have had on those dates, respectively.



INSTRUCTION NO. 15  
OBVIOUSNESS

Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, the invention must also not have been obvious to a person of ordinary skill in the field of technology of the patent at the time the invention was made.

In this case, ION contends that the following claims were obvious and thus invalid:

- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

ION may establish that a patent claim is invalid as obvious by showing, by clear and convincing evidence, that the claimed invention would have been obvious to persons having ordinary skill in the art at the time the invention was made in the field of the invention. You must consider obviousness on a claim-by-claim basis.

In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of the invention that someone would have had at the time the claimed invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention. Unlike anticipation, which allows consideration of only one item of prior art, obviousness may be shown by considering more than one item of prior art.

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all,

inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may but are not required to find obviousness if you find that at the time of the claimed invention there was a reason that would have prompted a person having ordinary skill in the field of invention to combine the known elements in a way the claimed invention does, taking into account such factors as:

- (1) Whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s);
- (2) Whether the claimed invention provides an obvious solution to a known problem in the relevant field;
- (3) Whether the prior art teaches or suggests the desirability of combining elements claimed in the invention;
- (4) Whether the prior art teaches away from combining elements in the claimed invention;
- (5) Whether it would have been obvious to try the combinations of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions; and
- (6) Whether the change resulted more from design incentives or other market forces.

In determining whether the claimed invention was obvious, you must consider each claim separately. You must be careful not to determine obviousness using hindsight; many true inventions can seem obvious after the fact. You should put yourself in the position of a person of ordinary skill in the field of the

invention at the time the claimed invention was made, and you should not consider what is known today or what is learned from the teaching of the patent.

In making these assessments, you should take into account any objective evidence (sometimes called “secondary considerations”) that may have existed at the time of the invention and afterwards that may shed light on the obviousness or not of the claimed invention, such as:

- (1) Whether the invention was commercially successful as a result of the merits of the claimed invention (rather than the result of design needs or market-pressure advertising or similar activities);
- (2) Whether the invention satisfied a long-felt need;
- (3) Whether others had tried and failed to make the invention;
- (4) Whether others invented the invention at roughly the same time;
- (5) Whether others copied the invention;
- (6) Whether there were changes or related technologies or market needs contemporaneous with the invention;
- (7) Whether the invention achieved unexpected results;
- (8) Whether others in the field praised the invention;
- (9) Whether persons having ordinary skill in the art of the invention expressed surprise or disbelief regarding the invention;

(10) Whether others sought or obtained rights to the patent from the patent holder; and

(11) Whether the inventor proceeded contrary to accepted wisdom in the field.

ION asserts that the claims of WesternGeco's patents identified below are rendered obvious by the following prior art references:

As to the '967 Patent:

- U.S. Patent No. 5,790,472 (referred to as the "Workman Patent")
- International Application WO 98/28636 (referred to as the "636 Patent Publication")

As to the '607 Patent:

- U.S. Patent No. 5,790,472 (referred to as the "Workman Patent")
- International Application WO 98/28636 (referred to as the "636 Patent Publication")

As to the '038 Patent:

- International Application WO 00/20895 (referred to as the "895 Application").

The foregoing patents and publications are prior art.

INSTRUCTION NO. 16

ENABLEMENT

The patent law contains certain requirements for the part of the patent called the specification. ION contends that the following claims are invalid because the specification does not contain a sufficiently full and clear description of how to make and use the full scope of the claimed invention:

- Claims 18, 19, and 23 of the '520 Patent
- Claim 15 of the '967 Patent
- Claim 15 of the '607 Patent
- Claim 14 of the '038 Patent.

To prevail, ION must show by clear and convincing evidence that the patent specification does not contain a sufficiently full and clear description of the claimed invention. To be sufficiently full and clear, the description must contain enough information to have allowed a person having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time the patent application was filed. This is known as the “enablement” requirement. If a patent claim is not enabled, it is invalid.

In order to be enabling, the patent must permit persons having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time of the original patent filing without having to conduct undue experimentation. However, some amount of experimentation to make and use the invention is allowable. In considering whether a patent claim satisfies the enablement requirement, you must keep

in mind that patents are written for persons of skill in the field of the invention. Thus, a patent need not expressly state information that skilled persons would be likely to know or could obtain.

In deciding whether a person having ordinary skill would have to experiment unduly in order to make and use the invention, you may consider several factors:

- (1) the time and cost of any necessary experimentation;
- (2) how routine any necessary experimentation is in the field of invention;
- (3) whether the patent discloses specific working examples of the claimed invention;
- (4) the amount of guidance presented in the patent;
- (5) the nature and predictability of the field of invention;
- (6) the level of ordinary skill in the field of invention; and
- (7) the scope of the claimed invention.

No one or more of these factors is alone dispositive. Rather, you must make your decision whether or not the degree of experimentation required is undue based upon all of the evidence presented to you. You should weigh these factors and determine whether or not, in the context of this invention and the state of the art at the time of the original application, a person having ordinary skill would need to experiment unduly to make and use the full scope of

## JA 68

the claimed invention. Requirements that are not part of the claims do not need to be enabled.

You must consider enablement on a claim-by-claim basis.

The original application date you must consider for purposes of enablement for the '520 Patent, the '967 Patent, and the '607 Patent is October 1, 1998. The original application date you must consider for the '038 Patent is June 15, 2001.

INSTRUCTION NO. 17  
WILLFUL INFRINGEMENT

In this case, WesternGeco argues that ION willfully infringed. For any claim that is infringed and is not invalid, you must go on and address the additional issue of whether or not this infringement was willful.

To prove that ION's infringement was willful, WesternGeco must prove by clear and convincing evidence that ION acted recklessly.

To prove that ION acted recklessly, WesternGeco must prove that ION actually knew or should have known that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent.

To determine whether ION had this state of mind, consider all facts which may include, but are not limited, to:

- (1) Whether or not the infringer acted in accordance with the standards of commerce for its industry;
- (2) Whether or not there is a reasonable basis to believe that the infringer did not infringe or had a reasonable defense to infringement;
- (3) Whether or not the infringer made a good-faith effort to avoid infringing the patent such as attempting to design a product the infringer believed did not infringe;
- (4) Whether or not the infringer tried to cover up its infringement.



INSTRUCTION NO. 18  
DAMAGES GENERALLY

If you find that ION infringed any valid claim of the '520, '607, '967, and/or '038 patents, you must then consider what amount of damages to award to WesternGeco. Since I have already found that ION infringes claim 18 of the '520 patent, you must award damages if you find that claim to be valid.

I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win this case, on any issue.

The damages you award must be adequate to compensate WesternGeco for the infringement. They are not meant to punish an infringer. Your damages award, if you reach this issue, should put WesternGeco in approximately the same financial position that it would have been in had the infringement not occurred.

WesternGeco has the burden to establish the amount of its damages by a preponderance of the evidence. In other words, you should award only those damages that WesternGeco establishes that it more likely than not suffered. WesternGeco must prove the amount of damages with reasonable certainty, but need not prove the amount of damages with mathematical precision. However, WesternGeco is not entitled to damages that are remote or speculative.

There are different types of damages that WesternGeco may be entitled to recover. In this case, WesternGeco seeks lost profits for some acts of infringement and a reasonable royalty for other acts

JA 71

of infringement. For an act of infringement proven by WesternGeco, WesternGeco may recover either lost profits or a reasonable royalty, but not both.

I will give more detailed instructions regarding damages shortly. Note, however, that WesternGeco is entitled to recover no less than a reasonable royalty for each act of infringement.

INSTRUCTION NO. 19

LOST PROFITS

In this case, WesternGeco seeks to recover lost profits resulting from ION's alleged infringement.

To recover lost profits, WesternGeco must show by a preponderance of the evidence that ION's alleged infringement of a valid patent claim caused WesternGeco to lose sales. In other words, WesternGeco must show a reasonable probability that it would have made the sales it says it lost but for the infringement. This but-for causation inquiry requires a reconstruction of the market as it would have developed without the infringing product to determine what sales WesternGeco would have made in the absence of the infringement.

You may infer that WesternGeco has proven its lost profits if you find that WesternGeco has proven each of the following by a preponderance of the evidence:

- (1) There was demand for the patented product;
- (2) There were no acceptable, noninfringing alternatives, or, if there were, that WesternGeco nonetheless lost some profits as a result of the infringing activity;
- (3) WesternGeco had the manufacturing and marketing capacity to make some of the infringing sales it says it lost; and
- (4) The amount of profit WesternGeco would have made if ION had not infringed.

I will now explain each of these factors.

### DEMAND FOR THE PATENTED PRODUCT

Demand for the patented product can be proven by significant sales of WesternGeco's patented product. Demand for the patented product can also be proven by significant sales of an infringing product containing the patented features.

### ACCEPTABLE NON-INFRINGEMENT SUBSTITUTES

In order to be considered an "acceptable" non-infringing substitute, the product alleged to be the substitute must have one or more of the advantages of the patented invention that were important to customers. If, however, the realities of the marketplace are that competitors other than WesternGeco would likely have captured some or all of the sales made by ION, even despite a difference in the products, then WesternGeco is not entitled to lost profits on those sales.

A non-infringing substitute may be considered "available" as a potential substitute even if the product was not actually on sale during the infringement period. Factors suggesting the alternative was available include whether the material, experience, and know-how for the alleged substitute were readily available at the time of infringement. Factors suggesting the alternative was not available include whether the material was of such high cost as to render the alternative unavailable and whether an alleged infringer had to design or invent around the patented technology to develop an alleged substitute.

In order to assess whether there is an absence of acceptable non-infringing substitutes, you must consider whether non-infringing substitutes existed

that were acceptable to the *specific* purchasers of the allegedly infringing products, not “purchasers” generally. The test is whether purchasers of ION’s product were motivated to make their purchase by features of ION’s product that were attributable to the claimed invention. If so, non-infringing products without those features would not be “acceptable non-infringing substitutes,” even if they otherwise competed in the marketplace with the patented and allegedly infringing products.

#### CAPACITY

WesternGeco is only entitled to lost profits for sales it could have actually made. In other words, WesternGeco must show that it had the manufacturing and marketing capability to make the sales it says it lost. WesternGeco must prove that it was more probable than not that it could have made, or could have had someone else make for it, the additional products it says it could have sold but for the infringement. WesternGeco also must prove that it had the capability to market and sell the additional patented products.

#### MARKET SHARE

It is not necessary for WesternGeco to prove that WesternGeco and ION were the only suppliers in the market for WesternGeco to demonstrate entitlement to lost profits. If the realities of the marketplace are such that “acceptable non-infringing substitutes” were available from suppliers who would have made only some, but not all, of the sales allegedly lost by WesternGeco, then WesternGeco may be entitled to lost profits on a portion of the infringing sales. The burden is on WesternGeco, however, to show to a

reasonable probability that it would have made the alleged lost sales if ION's product had never existed. By the same token, even if you find that WesternGeco and ION were the only two suppliers of products having the advantages of the patented product, it does not necessarily mean that WesternGeco would have made all of the alleged lost sales. The burden is on WesternGeco to show that its product competed in the same market with ION's product and that it would have made the alleged lost sales if the infringement had not occurred.

For those infringing sales where WesternGeco does not seek, or does not prove, lost profits damages, the law requires that you award WesternGeco a reasonable royalty. I will now instruct you on how to calculate reasonable royalty damages.

INSTRUCTION NO. 20  
REASONABLE ROYALTY

If you find that WesternGeco has established infringement, WesternGeco is entitled to at least a reasonable royalty to compensate it for that infringement. If you find that WesternGeco has not proved its claim for lost profits, or has proved its claim for lost profits for only a portion of the infringing sales, then you must award WesternGeco a reasonable royalty for all infringing sales for which it has not been awarded lost profits damages.

A royalty is a payment made to a patent holder in exchange for the right to make, use, or sell the claimed invention. A reasonable royalty is the amount of royalty payment that a patent holder and the infringer would have agreed to in a hypothetical negotiation taking place at a time prior to when the infringement first began. In considering this hypothetical negotiation, you should focus on what the expectations of the patent holder and the infringer would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. In determining this, you must assume that both parties believed the patent was valid and infringed and the patent holder and infringer were willing to enter into an agreement. The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical

negotiation. Although evidence of the actual profits an alleged infringer made may be used to determine the anticipated profits at the time of the hypothetical negotiation, the royalty may not be limited or increased based on the actual profits the alleged infringer made.

In determining the reasonable royalty, you should consider all the facts known and available to the parties at the time the infringement began. Some of the kinds of factors that you may consider in making your determination are:

- (1) The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty;
- (2) The rates paid by the licensee for the use of other patents comparable to the patent-in-suit;
- (3) The nature and scope of the license, as exclusive or nonexclusive, or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold;
- (4) The licensor's established policy and marketing program to maintain his or her patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly;
- (5) The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter;



- (6) The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his nonpatented items, and the extent of such derivative or convoyed sales;
- (7) The duration of the patent and the term of the license;
- (8) The established profitability of the product made under the patents, its commercial success, and its current popularity;
- (9) The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results;
- (10) The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention;
- (11) The extent to which the infringer has made use of the invention and any evidence probative of the value of that use;
- (12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable business to allow for the use of the invention or analogous inventions;
- (13) The portion of the realizable profits that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or

significant features or improvements added by the infringer;

- (14) The opinion and testimony of qualified experts; and
- (15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

No one factor is dispositive, and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty the infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people. The final factor establishes the framework which you should use in determining a reasonable royalty, that is, the payment that would have resulted from a negotiation between the patent holder and the infringer taking place at a time prior to when the infringement began.

INSTRUCTION NO. 21  
INSTRUCTIONS ON DELIBERATION

When you retire to the jury room to deliberate on your verdict, you may take this charge with you as well as exhibits which the Court has admitted into evidence. Select your Foreperson and conduct your deliberations. If you recess during your deliberations, follow all of the instructions that the Court has given you about your conduct during the trial. After you have reached your unanimous verdict, your Foreperson is to fill in on the form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. You must never disclose to anyone, not even to me, your numerical division on any question.

If you want to communicate with me at any time, please give a written message or question to the bailiff, who will bring it to me. I will then respond as promptly as possible either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

After you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise. You may now retire to the jury room to conduct your deliberations.

SIGNED in Houston, Texas on this the 14<sup>th</sup> day of August, 2012.

[handwritten: signature]  
KEITH P. ELLISON  
U.S. DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

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No. 4:09-cv-01827

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WESTERNGECO LLC,  
*Plaintiff,*

v.

ION GEOPHYSICAL CORPORATION  
*Defendant.*

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**DKT. 665 - EXHIBIT 3  
FILED UNDER SEAL**

WesternGeco Claimed Non-Fugro Surveys				
Customer	Surveyor/ Vessel	Date	Region	Sims's Claimed Lost Revenue
BP	PGS / Apollo	March 2011	Angola	\$18.0 million
BP	PGS / Ramform Sterling	November 2011	Australia	\$45.0 million
Conoco- Phillips	CGGV / Geowave Voyager	October 2009	Australia	\$24.5 million

JA 82

Exxon-Mobil	PGS / Ramform Vanguard	January 2010	Angola	\$10.0 million
Petronas	CGGV / Geowave Commander	October 2010	Malaysia	\$13.0 million
Statoil	Polarcus / Asima	July 2011	Norway	\$6.1 million
Statoil	PGS / Ramform Vanguard	August 2011	Norway	\$11.8 million
Statoil	PGS / Ramform Vanguard	June 2011	Norway	\$13.0 million
Total	Polarcus / Nadia	October 2011	Nigeria	\$7.2 million
Total	PGS / Ramform Sterling	June 2011	Angola	\$15.8 million